

CLAIMS:

1. A method of controlling an engine speed of a multi-cylinder engine to regulate an increase of the engine speed at a start-up of the engine, comprising the steps of:

detecting the start-up of the engine;

detecting a warm-up condition of the engine; and

controlling the engine to inhibit combustion of at least one of the cylinders of the engine, according to the warm-up condition upon the detection of the start-up.

2. An apparatus for controlling an engine speed of a multi-cylinder engine to regulate an increase of the engine speed at a start-up of the engine, comprising:

a start-up detector for detecting the start-up of the engine;

a warm-up condition detector for detecting a warm-up condition of the engine;

and

a controller for controlling the engine to inhibit combustion of at least one of the cylinders of the engine according to the warm-up condition detected by the warm-up condition detector upon the detection of the start-up by the start-up detector.

3. The apparatus of Claim 2, wherein the start-up detector detects the start-up of the engine by detecting the engine speed, and wherein the controller performs the control when the engine speed detected by the start-up detector is lower than a predetermined engine speed.

4. The apparatus of Claim 2, wherein the warm-up condition detector detects a coolant temperature of the engine or a lubricant temperature of the engine, and wherein the controller performs the control based on the coolant temperature or the lubricant temperature detected by the warm-up condition detector.

5. The apparatus of Claim 2, wherein the controller is configured to inhibit combustion according to a predetermined pattern of non-combustion.

6. The apparatus of Claim 5, wherein the predetermined pattern of non-combustion includes a pause of combustion of at least one of the cylinders of the engine for a predetermined time length.

7. The apparatus of Claim 5, wherein the predetermined pattern of non-combustion includes a periodic or non-periodic pattern of non-combustion for at least one of the cylinders of the engine.

8. The apparatus of Claim 5, wherein the engine includes a fuel supply device, and wherein the controller is configured to cause the predetermined pattern of non-combustion by inhibiting fuel supply through the fuel supply device.

9. The apparatus of Claim 5, wherein the engine includes an igniting device, and wherein the controller is configured to cause the predetermined pattern of non-combustion by inhibiting spark from the igniting device.

10. The apparatus of Claim 2, wherein the controller is an electronic control unit.

11. The apparatus of Claim 2, wherein the engine includes a single throttle body.

12. The apparatus of Claim 2, wherein the engine is a four-cycle engine.

13. A personal watercraft comprising:

a multi-cylinder engine;

a water jet pump with which an input shaft thereof is connected rotatably full-time with an output shaft of the engine; and

an apparatus for controlling an engine speed of the engine to regulate an increase of the engine speed at a start-up of the engine, the apparatus including:

a start-up detector for detecting the start-up of the engine;

a warm-up condition detector for detecting a warm-up condition of the engine; and

a controller for controlling the engine to inhibit combustion of at least one of the cylinders of the engine according to the warm-up condition detected by the warm-up condition detector upon the detection of the start-up by the start-up detector.

14. The personal watercraft of Claim 13, wherein the start-up detector detects a pressure inside the water jet pump, and wherein the controller performs the control when the pressure detected by the start-up detector is lower than a predetermined pressure.